

## Community Interaction and Significance of Public Spaces

## Nitish Chandra<sup>1</sup> & Dr. Pushplata<sup>2</sup>

#### **Abstract**

Recreational / public spaces are integral part of social infrastructure of an urban area. There are various elements which form these public spaces and provide a character to it. The research paper explores the contribution of these elements in formalizing the activities and people's involvement & how a designed public space gains its character through public participation. Each city has its own unique image & tradition, expressed through the character of public spaces. A city is more than an agglomeration of building, roads, parks & people. Instead, it is made of a variety of spaces catering to diverse function and people. Open spaces give a personality to a city & provides a medium through which communication in a city takes place. These places can also be termed as **transcend spaces** within a city.

Key Words: Public space, Community Interaction, Transcend spaces

<sup>&</sup>lt;sup>1</sup>Department of Architecture and Planning, IIT Roorkee, India

<sup>&</sup>lt;sup>2</sup> Department of Architecture and Planning, IIT Roorkee, India



#### Introduction

Public spaces have played a fundamental role throughout history. From the time that humans first defined private spaces, public spaces have served as places where people have come together to exchange ideas. From the ancient Greek's *Agora* to the Middle Ages' *Commons* to early 20th century American urban streets and parks, *public spaces have been centers for free speech and public discourse.* 

Historically, the public spaces of cities have been centers of diversity. City streets, parks, and public transportation were melting pots of cultural differences, places where one would encounter people who dressed and spoke differently, hear people expressing opinions that one would never hear amongst their "peers", see people engaged in activities one had never seen before.

## **Understanding Public Spaces**

A public space is a social space such as a town square that is open and associated to all, regardless of gender, race, ethnicity, age or socio-economic level. Public spaces are a part of urban life, offering excitement and repose, markets and public ceremonies a place to meet friends and watch the world go by.

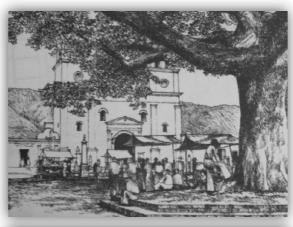
Specifically, in Indian society, the public spaces are the major nodes for social congregation typical Character of an Urban Set-up. From The Basic Chaukat (Under A Banyan Tree) In A Small Village To A Large Urban Park In A City, The Functioning Has The Same Basic Concept. In our country it is a strong need for social gatherings, common festival celebration, and public addresses etc. The public park does form a natural platform for conducting/carrying out these activities.

#### Aim

The aim of the seminar is to study & analysis on the factors that contributes to makes a successful public space.

## **Objective**

- To Understand the importance of such spaces and their role in everyday life
- To study the factors that contribute to the successful public space
- To study & understand the importance of visual aspects & physical element (natural/ manmade) for an open space that makes it more vital for vigorous activities
- To study the dynamism in activity & space







In the absence of public spaces the society would have a numb look.

## **Historical reference to Public spaces**

The square or plaza is for the city what the atrium represents for the family home. It is the well-equipped and richly appointed main hall or reception room. St Peter's Square in Rome is a prime example of such a place. St Peter's Square is, however, something more than an important node in Rome's urban fabric; it is the centre of the Catholic universe. Symbolically it represents the fountainhead of Christ's kingdom here on earth. Gianlorenzo Bernini's great elliptical colonnade sweeps outwards in two vast protective arms, encircling, enfolding and welcoming the Christian pilgrim

## **Urban Public open spaces**

Any open area within the city which is a chunk of land with no development in the form of building construction where people from different community get together for some *active or passive recreational or other activity*. These are specifically where public domain exists. These spaces can be recreational ground, tanks, leftover triangles, or institutional open spaces etc.

## **Town Squares**

A town square is an open area commonly found in the heart of a traditional town used for community gatherings. Other names for town square are civic center, city square, urban square, market square, public square, plaza (from Spanish), piazza (from Italian), and place (from French). Most town squares are hardscapes suitable for open markets, music concerts, political rallies, and other events that require firm ground. Being centrally located, town squares are usually surrounded by small shops such as bakeries, meat markets, cheese stores, and clothing stores. At their center is often a fountain, well, monument, or statue. Many of those with fountains are actually named Fountain Square.





# Forms Defining Open Spaces

There are two types of forms which define the character of any public space. The horizontal & vertical elements are part of these forms.

#### **Horizontal Elements**

#### Base plane

A horizontal plane lying as a figure on a Contrasting background defines a simple Field of space. This field can be visually Reinforced in the following ways

#### **Elevated base plane**

A horizontal plane elevated above the Ground plane establishes vertical surfaces Along its edges that reinforce the visual Separation between its field and the Surrounding ground

#### **Depressed base plane**

A horizontal plane depressed into the Ground plane utilizes the vertical surface Of the lowered area to define a volume of Space

#### Overhead plane

A horizontal plane located overhead defines a volume of space between itself And the ground plane

## **Vertical Elements**

Tree, Light/Electric Poles, Columns, Signage, and Vertical Linear Planes Arranged In L, U







Shape, and Sculpture etc elements defines the public space.

## **Classification of PublicSpaces**

Public spaces have been categorized ways by different authors.

- Spiro Kostof has elaborated the classification on their physical forms.
- Dines and Cattell classified on basis of user engaged with the space.
- Flusty categorized on the basis on their experience SCULPTURE given by people in five types.
- Mathew Carmona categorized it in positive, negative, ambiguous and private spaces.
- **Public** spaces India in B.V.Doshi has classified them as street bazaars, local activity streets, activity nodes, and public greens

**MONUMENT** 





in a no. of







 According to Carr et. Al. (1992), there are eleven functional types of public spaces which together provide a very inclusive list.

There are various benefits of a well designed and planned public space:

- 1. It supports local economy by encouraging commercial activities.
- 2. It encourages pedestrian movement
- 3. Attracts business investments
- 4. A well designed public plaza helps in environmental improvement.
- 5. It encourages cultural activities and provides more opportunities to develop social harmony
- 6. It attracts tourism and helps in economy

Great public spaces contribute to community health – socially, economically, culturally and environmentally. They add enhancement to the civic realm not only visually, but also in providing a sense of character and a forum for public activities. They can be anchors for downtowns and communities, acting focal points for definition and foundations for healthy growth.

#### . At a glance, public spaces -

- · Give identity to cities
- Benefit cities economically
- Help the environment
- Provide settings for cultural and social activities
- Support local economies and informal sector of markets
- Attract business investments
- Attracts tourism

- Provide cultural opportunities
- Encourage volunteerism
- Reduce crime
- Improve pedestrian safety
- Increase use of public transportation
- Improve public health
- Increase the livability of cities.

## **Need for public space**

The Urban Environment Of Today Differs Greatly From That Which Man Evolved. It Lacks In Natural Environment Stimuli And Isolates Men From Nature, Creating Pressure On The Individual, Which May Not Only *Annoy And Irritates* But Also *Reduce The Efficiency* In The Task.

Social and physical aspects of public spaces:

- Relaxes The Mind From Day To Day Complexities
- Area for social interaction
- Helps In personal development of human as a social being.
- Helps Incorporating Civic Values In The Public
- Informative & communicative role

Aesthetical & ecological aspects:

- They Help Provide The Right Balance To The City
- Act as a breathing space for the city
- These Spaces Act As The Supporting System For The Built Environment



- Such Spaces Add To The Beauty & enhance the performance Of The City
- It Gives An Identity To The City

According to Spiro Kostof (1992) streets and squares are primary place of transit, capturing public life in momentary pauses from a river of people in motion. The public place or space, on the other hand, is a destination; a purpose-built space is freedom of action and the right to stay inactive. Such spaces host structured or spontaneous activities festivals. riots. celebrations, public entertainment, and trade and because of those places will bear the designed evidence of our shared record of participation, recreation and community behavior.



## Principles of good plaza design

Every successful public space must respond to:

- Its physical context adjacent buildings and uses
- Its local climate sun, shade, wind, rain
- Its own history
- Its users

It must include the elements that are attractive to people – activity, beauty, safety, focal point(s)

## History, tradition & character

 Certain forms and patterns have appealed to humans universally over time and place, and these form traditional design.

- The form of the town square is a significant historical artifact.. The pattern and interaction of multiple strong geometrical elements squares, circles, diagonals traditionally forms the structure and foundation for important civic spaces.
- Creating a sense of procession through different stages of a space, with visual and physical focal points, is another universal design principle.
- In an existing, historical civic space, it is important to respect the essential elements of the historical form and order while updating the elements to make them relevant to the present and future (just as



their original, historical founders did at their creation).

• Design elements should inject local character and flavor – local landscape, local industry, local art and craft. both historical and contemporary.

#### **Access & linkages**

- Public spaces should be accessible universally i.e to people of different age groups, gender and physical abilities.
- Public transport services must be present, providing convenient connectivity to public spaces.
- The places should be accessible through different modes of transport.
- Better visual connectivity with adjoining areas improves the environment.

#### **Activity & Social interaction**

- Create intense use, both formal and informal.
- Offer lots of seating some that can be in the sun, some that can be in the shade.
- Provide elements and activities that attract a varied cross-section of people young to old, singles, families or groups.
- Provide elements and activities that give people reasons to be there at all different times – passing through, meeting up or taking a break during work or school hours, , socializing or enjoying events and entertainment during off hours, evenings and weekends.
- Offer many choices for solitude or for gathering, for relaxing or for watching or participating, choices to be in the open or

to be in a secluded area (to view or to be in view).

#### **Comfort & appearances**

People should be able to use the space round the clock with no hesitation or fear.

The space should allow physical comfort as well as choice of places to sit or to gather.

The places should look warm and welcoming with carefully design of elements.

People of different age groups and gender should able to find their niches in public spaces

- Function and appearance are linked, but are not identical, as in a home's living room. Therefore, to create the best whole, each detail should be measured against both function and appearance.
- Successful public spaces find opportunities to create beauty and visual interest, which in turn attract people. Construction materials should also project an image of value and durability.
- Maintenance and Operations: Even if all of the other elements of a successful public space are present, without the look and feel of safety and cleanliness, a place will fail or fall far short of its potential. The space must be well-maintained and cared-for, with a maintenance plan that is realistic and sustainable. There must be an obvious sense of continuous informal surveillance from a critical mass of users and from the surroundings, and regular law enforcement should be used to minimize anti-social behavior bold enough to continue despite this surveillance.



## Plaza design guidelines

Plaza is an open space designed for public use and defined by surrounding buildings and/or streets. Its primary functions are to encourage a diversity of opportunities for social interaction and activities, to provide relief and relaxation, to expand and reinforce the public realm and to contribute to the liveability and general amenity of the downtown and other developing parts of the city.

Historically, plazas have been central to development of urban centres. Examples such as European squares and piazzas have afforded citizens places to meet, trade and celebrate. In a modern changing city such as Vancouver, it is also essential that plazas have a purpose and are not merely leftover areas between buildings. As the city grows, opportunities are presented through new development to provide open spaces that offer delight, enlightenment surprise, rest, amusement for a wide variety of users over the course of the day, week and vear.

Activities accommodated by public plazas such as socializing, resting, eating, bus waiting, exhibitions and open air markets add to the quality of city living and working, enhancing diversity and

## Visibility & views

Good street-to-plaza visibility announces the plaza's internal attractions. It signifies that it is a public space, it permits users to watch street activity and it makes the space safer. Good visibility can be achieved by the following: increasing the educational and cultural opportunities that define the positive experience of urban living.

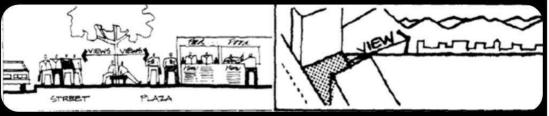
#### Context

Like a successful building, a plaza requires a program of use and a strong concept. Therefore, careful thought should be given to a plaza's principal functions and to its relationship with the adjacent public realm (i.e. streets, pedestrian routes, other open spaces), activities and architecture

While some plazas may act primarily as pedestrian nodes, others function best as important viewpoints or enhance the setting for a building. A plaza should also reflect and reinforce the character of its location. For example, the purpose and nature of a plaza on Robson Street may differ significantly from one on Georgia Street. Within an area of the city, an individual plaza may function best as part of a hierarchy of open spaces, some small, others grand, still others as links within an open space network. Therefore, an understanding of area objectives, existing plazas and pedestrian movement, building and street scale, materials and circulation patterns are all essential in developing a use program and overall concept.

- arranging any walls and planting to not screen or block off the plaza from the street;
- locating the plaza at or as close as possible to street level, preferably no more than 1.0 m above or below street level. A plaza should also take advantage of distant views to the mountains, ocean and other landmarks wherever possible.

International Journal of Research (IJR) Vol-1. Issue-5. June 2014 ISSN 2348-6848



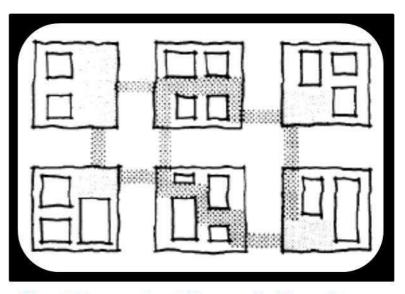
Good street-to-plaza visibility should announce the plaza's internal attractions

Plazas should take advantage of views

## Linkages

A plaza should be linked to other surrounding open spaces, as well as interior spaces such as lobbies, to create a dynamic pedestrian network. Such links will make the plaza more useful and provide a more dynamic, coherent urban environment. Linkages can be achieved or reinforced using the following devices:

- Passages;
- Bridges;
- Steps/ramps;
- paving patterns;
- planting.



Plaza linkages should be created to achieve a coherent pedestrian network

## Safety

#### **Design**

A plaza will be unsuccessful if it is not well used because of a perception of unsafeness. The design of a plaza should provide for safety. Regard should be given to principles of designing for safety such as defensible space, clear sightlines, good lighting and provision of alternate "escape" paths escape paths. The differences in usage, ownership and responsibilities among commercial. commercial/residential and residential plazas should be recognized, so that the different approaches to their design relative to urban safety is addressed at the initial planning stages. For example, zones of responsibility should be established and delineated in the design of these plaza types, taking into account their respective use patterns.

#### Accessibility

A plaza should provide easy and direct access particularly for the elderly, disabled and young children. Ramp slopes should not exceed 8.3 percent and handrails should be incorporated. Selection of surface materials should result in easy access for the elderly and disabled, and also discourage incompatible plaza activities such as skateboarders.



Placement of planters, non moveable seating and handrails should further encourage easy wheelchair and pedestrian access, and seek to discourage the use of skateboards.

#### **Defensible Spaces**

A plaza should afford good visual surveillance opportunities both from within the space and along the edges. People need to feel secure and will usually avoid dark hidden corners and vacant places.

A plaza should be designed to maximize opportunities for casual monitoring from its perimeter and abutting developments. Surveillance and overview from adjacent sidewalks, windows and decks are necessary components that contribute to the safety of a plaza.

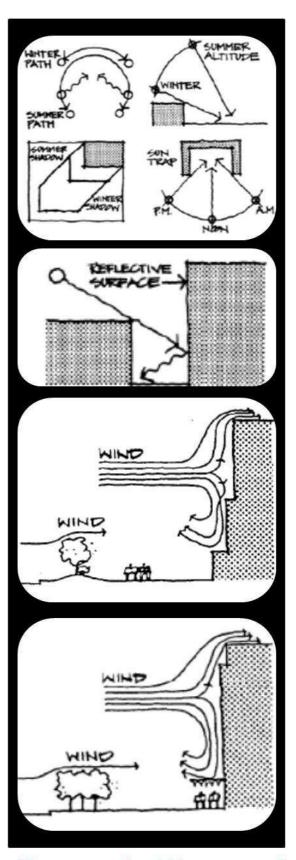
#### **Lightning & public features**

Good night time generalized lighting is important to enhance safety of a plaza, particularly if it functions as a short cut or as a through route for pedestrians. Appropriately located and designed lighting may also discourage loitering. In autumn and winter, darkness occurs in late afternoon, coinciding with rush hours. This is generally a time of maximum plaza pedestrian flow, generated from office and retail buildings so lighting should be on timers to account for seasonal changes. A plaza should also provide easy and direct access to public telephones and information signs.

#### **Environment**

#### Sunlight

Warmth and sunshine are major user attractions. Sun paths, sun altitudes and shadow patterns in the plaza should be examined for all seasons, particularly the



Plaza users should be protected from harsh winds with planting and canopies



spring and autumn. Sunlight can be maximized by:

- locating seating in areas of maximum sunlight;
- creating sun traps areas surrounded by walls with an orientation toward the south (walls should not block plaza/street visibility);
- utilizing reflective light surfaces (if no direct sunlight is available).

#### Wind

Downdrafts from surrounding high-rise buildings can cause user discomfort and should be prevented or reduced through specific design measures. Wherever possible, protection should be offered from strong northwest winds and from harsh easterly winds which can accompany fall and winter rainstorms. Wind reduction can be achieved by the following measures:

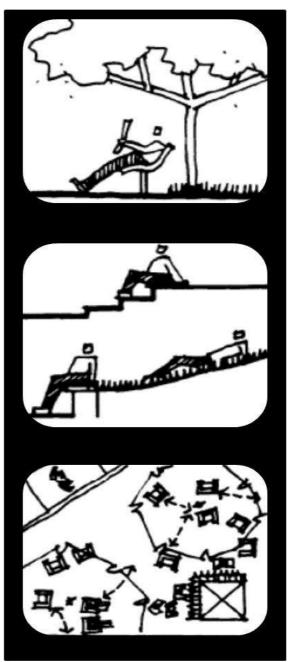
- Avoid large, open, unprotected areas;
- •Aavoid wind funnels: narrow openings between buildings with easterly or northwest alignment;
- Utilize planting, low walls and canopies for wind deflection.

#### **Noise**

High levels of traffic, industrial and other ambient noises detract from the enjoyment of a plaza. Noise can be partially mitigated by detracting attention from the noise source through the introduction of such elements as fountains or waterfalls.

#### **Weather protection**

Plazas should be designed with some overhead weather protection. Such protection should be provided at waiting points and along major pedestrian routes.



Protection can be achieved with the following devices:

- Canopies;
- Awnings;
- Shelters;
- Gazed trellises.

#### **User Attractions**

#### Seating



Good seating is important to plaza users. Without it, fewer people will stop to use a space. There are four major points to remember when planning seating:

- a) Plentiful Seating
- maximize opportunities for sitting: walls, steps, planters, pool edges, lawns.
- b) Choice of Sitting Location
- locate seating toward street, oriented to a view, near building entrances, next, to attractions/amenities, in shade, in sun.
- c) Variety of Seating Types
- In groups/couples/alone
- Fixed and moveable
- Disabled accessible.
- d) Comfortable Seating
- provide warmth: generally wood is preferable to stone, concrete or metal;
- provide contoured seating, preferably with a back and armrest.

#### **Activity Generator**

Successful plazas generally are characterized by several activity generators. Examples of such activity generators include food and retail outlets. as well as entertainment, which attract users and encourage socializing, relaxation and festivities. Good plaza management can include soliciting groups to activate the space, such as folk dancers, street theatre musicians and exhibitors. Providing the infrastructure for events (e.g. electrical outlets, water supply and lighting) will facilitate such activity.

## **Amenities**

A plaza which is furnished with a variety of amenity features encourages general public usage and creates a sense of liveliness and excitement. Art work should provide a focal point for the plaza or become an integral component of the overall design of the plaza. Bike racks, drinking fountains and waste receptacles are practical, essential amenities.

Some others are:

- Game tables:
- Kiosks for information and posters;
- Open air cafes;
- Children's play equipment (Where appropriate).

## Environmentally Sensitive Design

Landscape design today must recognize a new reality in environmental awareness. example. For wherever possible. permeable surfaces should be considered. Use of drought resistant plants may lessen dependency on automatic irrigation. Selection of plant materials should be done with a mind to reduce use of chemical laden maintenance. Perhaps plantings can be more productive by providing a habitat for birds. A revised aesthetic may be in order: seasonal change can be achieved by selecting a variety of flowering or colourful shrubs and perennials instead of largely relying on annuals which are put to waste several times during the year.

#### **Natural elements**

Natural elements which reflect seasonal change should be provided, such as water and trees, shrubs, ground covers, vines and flowers in a variety of colours and textures. Whenever appropriate, lawn



areas should be provided to visually "soften" the urban environment and as an effective dry weather seating area. Vegetation should never create substantial enclosures from the street.

#### **Detailing & Materials**

Plazas which are built of high quality durable materials, which reflect thoughtful detailing consistent or compatible with the development's architectural language, and acknowledge which the practical considerations of drainage, non-slip paving, disabled access and easy maintenance have a good chance of being successful. Quality detailing implies attention to jointing, building and street and technically edges, correct construction techniques. Plants used should be of the highest quality and in sufficient quantity and of sufficient scale to make an impact. Plantings should be selected and located so that their functional and aesthetic qualities can be maximized. Incorporation of irrigation and adequate drainage will help to assure their survival and best possible appearance over time.

#### **Spatial Variety**

Unless there is a specific symbolic or functional desire to accommodate large scale activities, large open spaces should be spatially defined into smaller, more easily identifiable and relatable areas. These smaller areas facilitate orientation and territory definition. People commonly gather at articulated edges in or around a plaza. A distinct sense of place can be achieved, in part, by defining edges and establishing a sense of enclosure through the use of canopies, trees, arcades and trellises which must be balanced with issues of visibility and defensibility.

#### **Good Management**

Good plaza management should be provided, with emphasis on maintenance, operation and activity programming. This not only affects how a plaza looks but also how well it can attract users. By keeping the grounds clean, maintaining the lighting, seating and surface areas, providing seasonal planting and by operating a food service, the management will create a safe, lively and attractive space.

#### Conclusion

- •Urban PUBLIC SPACES should always associated with some public activities. Commercial Office or Mixed Uses with Cultural and/or Educational uses Street-level retail with a cultural/educational emphasis such as art galleries emphasized the urban square
- •The public square is probably still the most important element in city design; it is the chief method by which a town or city is both decorated and given distinction.
- •It is the natural setting for the most important civic and religious buildings, a place for fine sculpture, fountains and lighting and, above all else, a p, g g, , place where people meet and socialize.
- •When such public places are designed according to some fairly basic principles and are imbued with a sense of place, they take on an added symbolic meaning.
- •The most important physical quality of such spaces is enclosure. The methods of enclosure are many though the principles are few.



#### References

- 1. Cuesta, R., Sarris, C., Signoretta, P., & Moughtin, J. C. (2012). *Urban design: Method and techniques*. Routledge.
- 2. Foschini, G. J. (1996). Layered space-time architecture for wireless communication in a fading environment when using multi-element antennas. *Bell labs technical journal*, *1*(2), 41-59.
- 3. Gatje, R. F. (2010). *Great public squares: an architect's selection*. WW Norton & Company.
- 4. Gehl, J. (2011). Life between buildings: using public space. Island Press.
- 5. Giedion, S. (1967). *Space, time and architecture: the growth of a new tradition.* Harvard University Press.
- 6. Ling, O. G., & Tan, T. T. (1992). The social significance of public spaces in public housing estates. *Public Space: Design, Use and Management. Singapore*, 69-81.
- 7. Marcus, C. C., & Francis, C. (Eds.). (1997). *People places: Design guidlines for urban open space*. John Wiley & Sons.
- 8. Moughtin, C. (2003). Urban design: street and square. Routledge.
- 9. Pearson, M. P., & Richards, C. (Eds.). (2003). *Architecture and order: approaches to social space*. Routledge.
- 10. Ruddick, S. (1996). Constructing difference in public spaces: race, class, and gender as interlocking systems. *Urban Geography*, 17(2), 132-151.
- 11. Sampson, R. J., & Raudenbush, S. W. (1999). Systematic social observation of public spaces: A new look at disorder in urban Neighborhoods 1. *American journal of sociology*, *105*(3), 603-651.
- 12. Woolley, H. (2003). Urban open spaces. Taylor & Francis.
- 13. Whyte, W. H. (1980). The Social Life of Small Urban Spaces.